touch-me

OPERATING
AND MAINTENANCE MANUAL

ATARI™
*Innovative
leisure*

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A. INTRODUCTION AND WARRANTY INFORMATION

Touch-Me is a coin operated amusement device which tests the concentration and memory-depth of the player.

The electronics of this game are solid state for long life and low maintenance. The mechanical assemblies (push buttons and coin mechanism) have been designed modularly for easy removal and servicing.

However, as with all devices mechanical or electrical, there may be minor problems. *If a printed circuit board computer (PCB) fails within the warranty period, contact* *the distributor from whom the game was originally purchased* for repair or replacement instructions.

Any PCB repair attempted by anyone other than authorized Atari Service Center personnel will void the PCB warranty.

If the PCB fails *after* the one-year (from date of factory shipment) warranty period has expired, it will be repaired for a nominal parts and labor charge.

B: ACCESS AND BASIC CONSTRUCTION

The lift up top provides convenient access to all sub-assemblies and adjustment points. Opening the top also exposes all the coin handling equipment—the coin acceptor and rejector linkage, the coin counter and the coin box.

An interlock switch is mounted to the cash deck and turns off the entire machine when the top is opened. The *interlock switch protects the operator from accidental shock, so it must always be kept in perfect working order.*

If you need to test or adjust the machine with the top open, place the interlock switch in the closed or "on" position by pulling out the white actuator shaft.

All the major sub-assemblies have been designed modularly for easy servicing or replacement. The control panel, and the Touch-Me computer can each be removed after the wiring and release bolts have been removed.

C: NEW MACHINE SET-UP AND CHECK OUT PROCEDURES

Before turning this machine on, inspect it carefully for any damage which may have occurred during shipping.

As each new Touch-Me leaves the factory, every component and sub-assembly is carefully checked for proper operation and adjustment. However, since parts may have been damaged or adjustments changed during shipping, the following check out procedure must be repeated prior to placing the machine on location.

1. With the machine unplugged, open the top and carefully inspect both the exterior and interior of the machine for any obvious shipping damage to the cabinet or internal components and sub-assemblies. If any such damage is discovered, contact the carrier immediately. Then contact the distributor from whom the game was originally purchased for repair or replacement instructions.

2. Inspect the interior of the machine more carefully looking for broken or disconnected wires, sub-assemblies pulling loose or not firmly mounted and any foreign objects shorting electrical connections. Make sure that the PCB edge connectors and the fuse are firmly seated. Note: The plug is located inside the cabinet for shipping purposes, and should be fed through the 1½" hole located at the left lower bottom portion of the cabinet.

3. Plug in the machine and if the top is up, defeat the interlock switch by pulling out the white actuator shaft. At this point the button lamps should be randomly flashing in the attract mode and no sound should be heard. The lamp test switch, located in the upper left hand corner of the computer, may be pressed. This should light all of the lamps except the score.

4. Insert several old *and* new coins into the coin acceptor. No genuine coin should be rejected. One coin should produce game credit and advance coin counter one digit. Check for proper game sequence, making sure all aspects of the game (score, wait, your turn, miss 1, miss 2, and game over lamps) are functioning correctly. If you are not familiar with the game sequence for Touch-Me, read the game sequence analysis.

D: THE GAME SEQUENCE

With the game plugged in and the top down, the control panel lamp display will be in the attract mode. The attract mode for Touch-Me is the random flashing of the four button lamps, along with watch & wait, and touch & match. Score will remain at some random number when plugged in or where the last player left off. Miss 1, miss 2, and game over will remain constantly lit in the attract mode.

Coin insertion resets the score to zero and turns off miss 1, miss 2, and game over lamps. The "wait" lamp will then light, and one of the four buttons will flash along with its own selected audio tone. The "wait" lamp will then go off and the "your turn" lamp will light, after which the player will have approximately 10 seconds to push the button which had previously flashed. If the player is successful in matching the computer he will score one point. If the wrong button is pushed miss 1 will light and the computer will repeat the same button over. Each time a proper match has been made the computer will add one button to the sequence, thus making the match more complicated. On the third miss match end game will light and the buttons will go into the attract mode and the score will remain where the player left off.

E: THE ANTENNA WIRE AND ANTI-STATIC MODIFICATION

An *electronic latch* circuit has been incorporated in the Touch-Me computer. One function of this circuit is to turn off or prevent game credit if a player tries to obtain free games by inducing a static charge in the machine. The *antenna wire* is an integral part of this system.

When a static discharge occurs, an electric current is induced in the antenna wire. This impulse is transmitted through the antenna wire to the electronic latch circuit which turns off game credit and resets the computer to the attract mode.

The antenna wire is a length of white wire approximately 12 inches long. One end of the antenna is connected to pin 16 of the PCB edge connector and the other end has been intentionally left not connected.

The length of the antenna wire has been pre-adjusted by the factory to the overall optimum length, however some environments may require more or less critical adjustment.

Lengthening the antenna wire increases the sensitivity of the circuit; cutting the wire shorter decreases the sensitivity.

If players are obtaining free games by inducing static charges in the machine, lengthen the antenna wire (add a piece of wire) by a few inches so that a lesser charge will turn off game credit. If you have problems with static charges accidentally turning off game credit during the progress of a legitimate game, try cutting the antenna shorter in increments of 1-2 inches. Try to cut only the minimum amount off the antenna, otherwise players may be able to obtain free fames.

The anti-static modification may be tested during a game by touching the end of the antenna wire with your finger as the body usually has enough capacitance to actuate the electronic latch. If the game is shut off, the circuit is functioning correctly.

F: TOP SECTION SUB-ASSEMBLIES: SERVICE PROCEDURES

Use the following procedures to replace the general illumination lamps, the plexiglass screen and adjust volume.

1. GENERAL ILLUMINATION LAMPS: Twenty-six 6 volt lamps are mounted on a PC board behind the plexiglass screen. To replace burned out lamps, unlock and lift top. Remove necessary computer hardware and replace

with GE44 or GE47.

2. VOLUME ADJUSTMENT: The volume control is located on the computer board near the edge connector and may be set to your preference. However, remember that after adjustment closing the top will decrease the volume somewhat.

DETAIL B

.62

△10 STAPLE IN POSITION
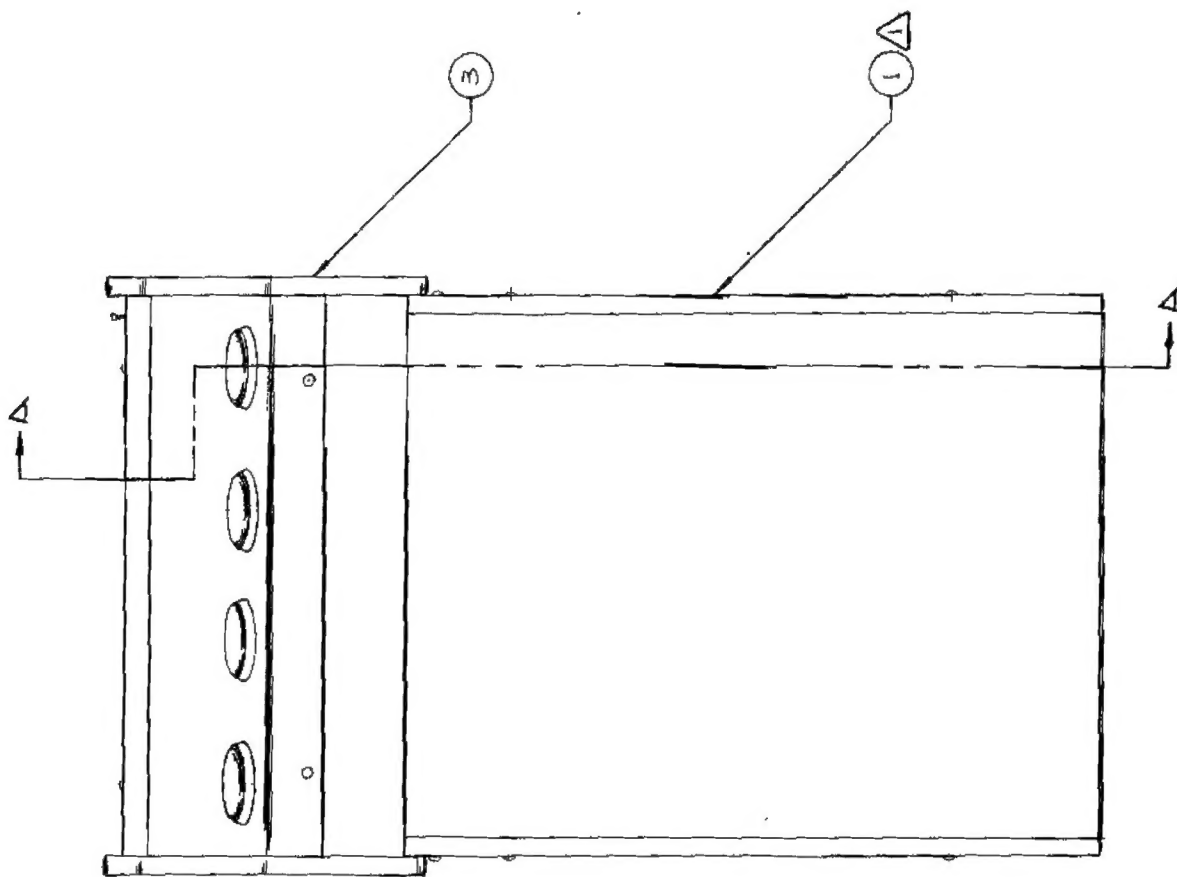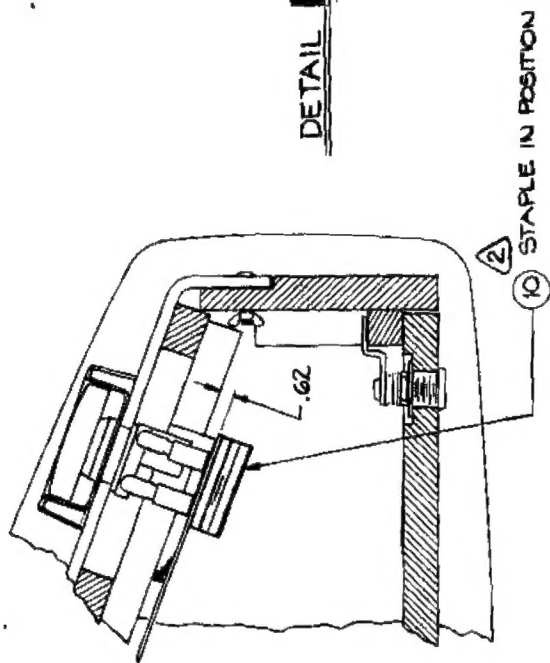
ITEM	PART NO.	QTY.	DESCRIPTION
1	A001111	1	Base Assy
2	A001112	1	Shelf Assy
3	A001113	1	Panel Assy
4	A001114	1	P.C. Board Hinge Assy
5	000909/71-1125CU	1	Coin Aceptor Assy, 25¢
6	75456/72-5508	2	Screw, Mach, Hex Hd, #1/4-20 x 1/2
7	75457/72-5520	2	Screw, Mach, Hex Hd, #1/4-20 x 1-1/4
8	75312/75-7810	4	Screw, Wood, Rnd Hd, Phil #8 x 5/8 Lg
9	75131/75-015S	4	Washer, Flat, #1/4
10	001961-01	2	Extrusion

Figure 1. Touch-Me — Front View

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⑧ 4 REQD

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⑨ } 2 REQD

2 REQD { ⑦
⑨

④

B

②

⑦
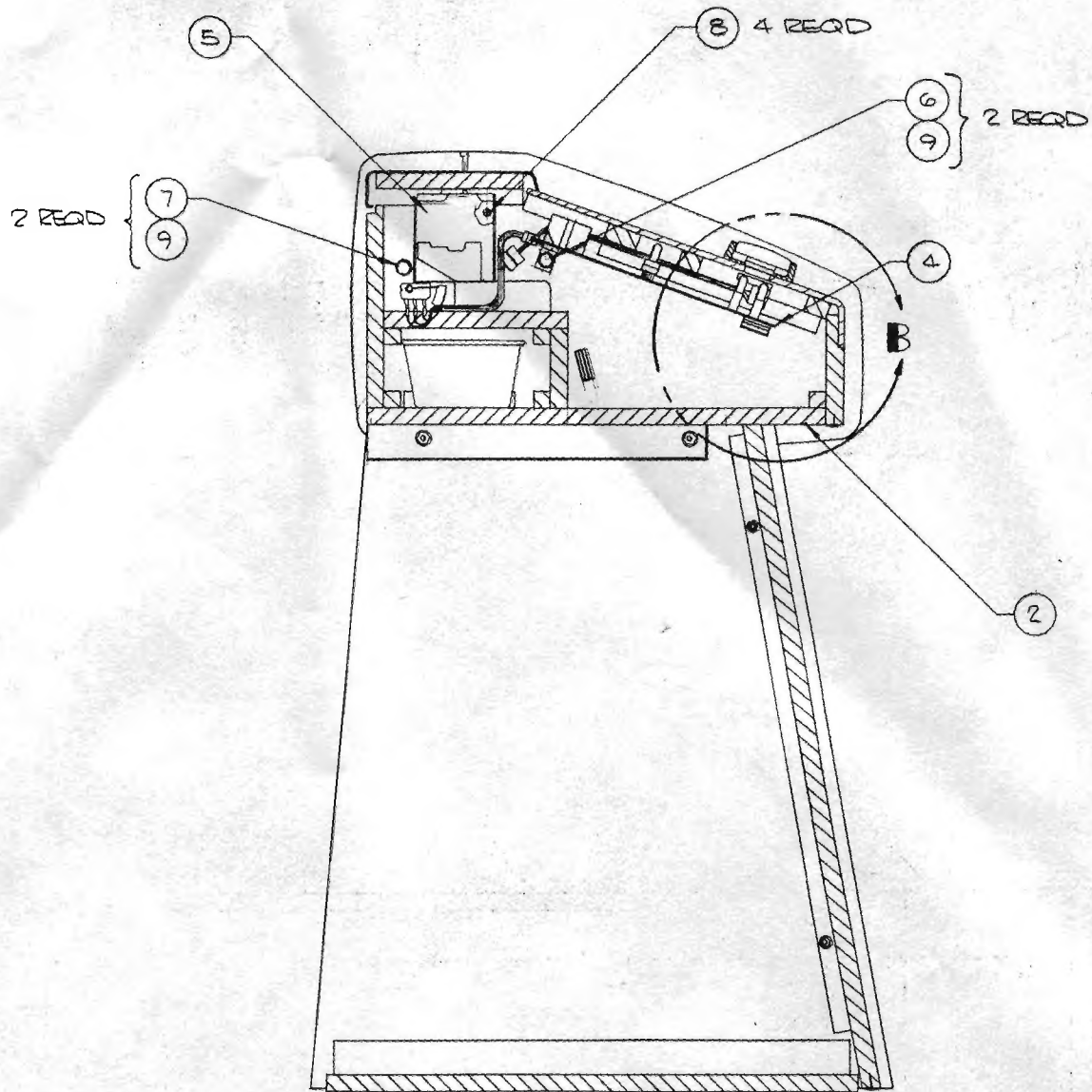
SECTION A-A

Figure 2. Touch-Me – Side View

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DETAIL **B**
SCALE : NONE
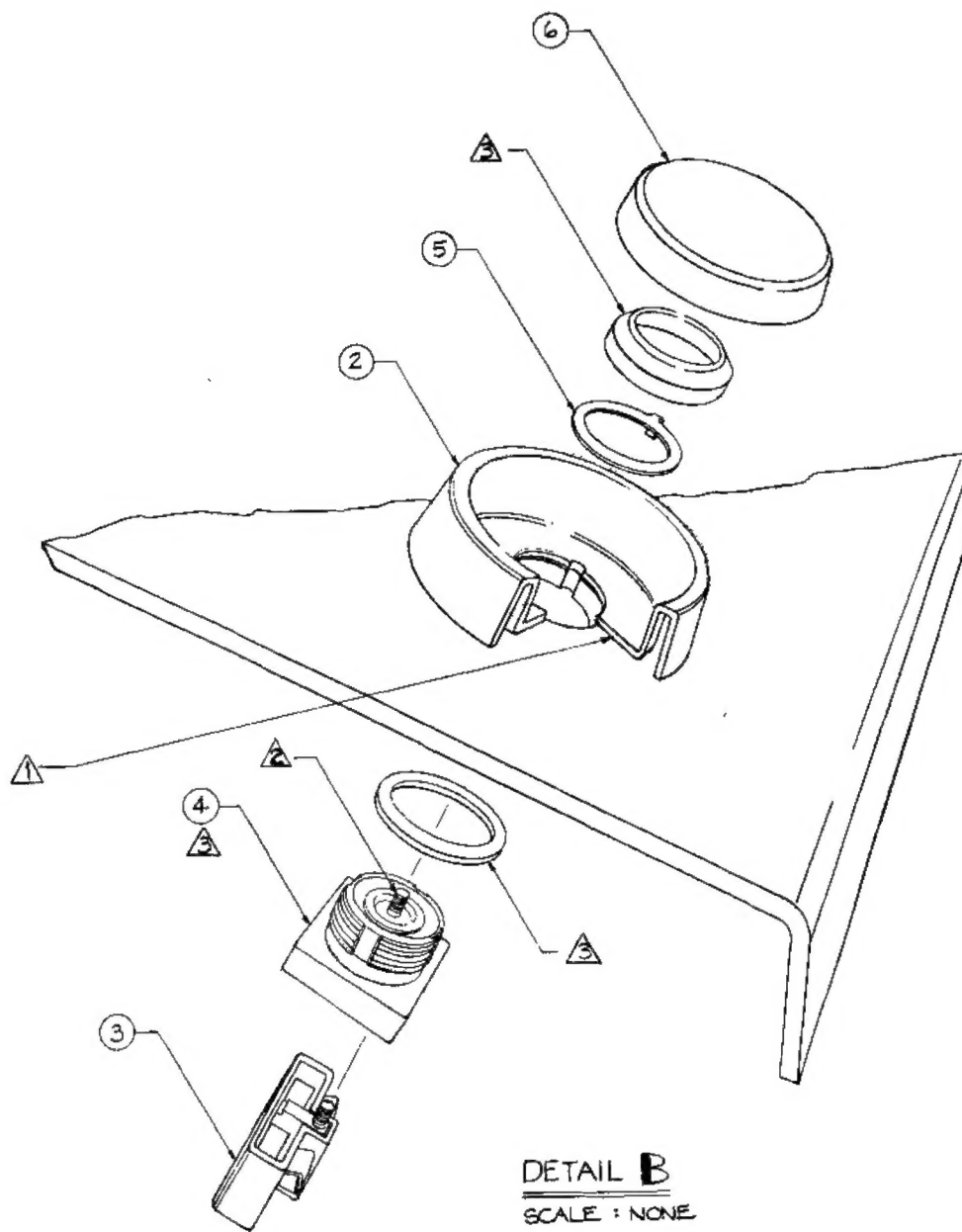
ITEM	PART NO.	QTY.	DESCRIPTION
1	001136	1	Panel, Plexiglas
2	001143	4	Cup, Switch, ABS
3	60012	4	Contact Block, SPST, N.O.
4	60009	4	Switch, Pushbutton, Rundel #R5
5	60011	4	Ring, Anti-rotation
6	60010	4	Cap, Mushroom, 2-1/2" Diam.

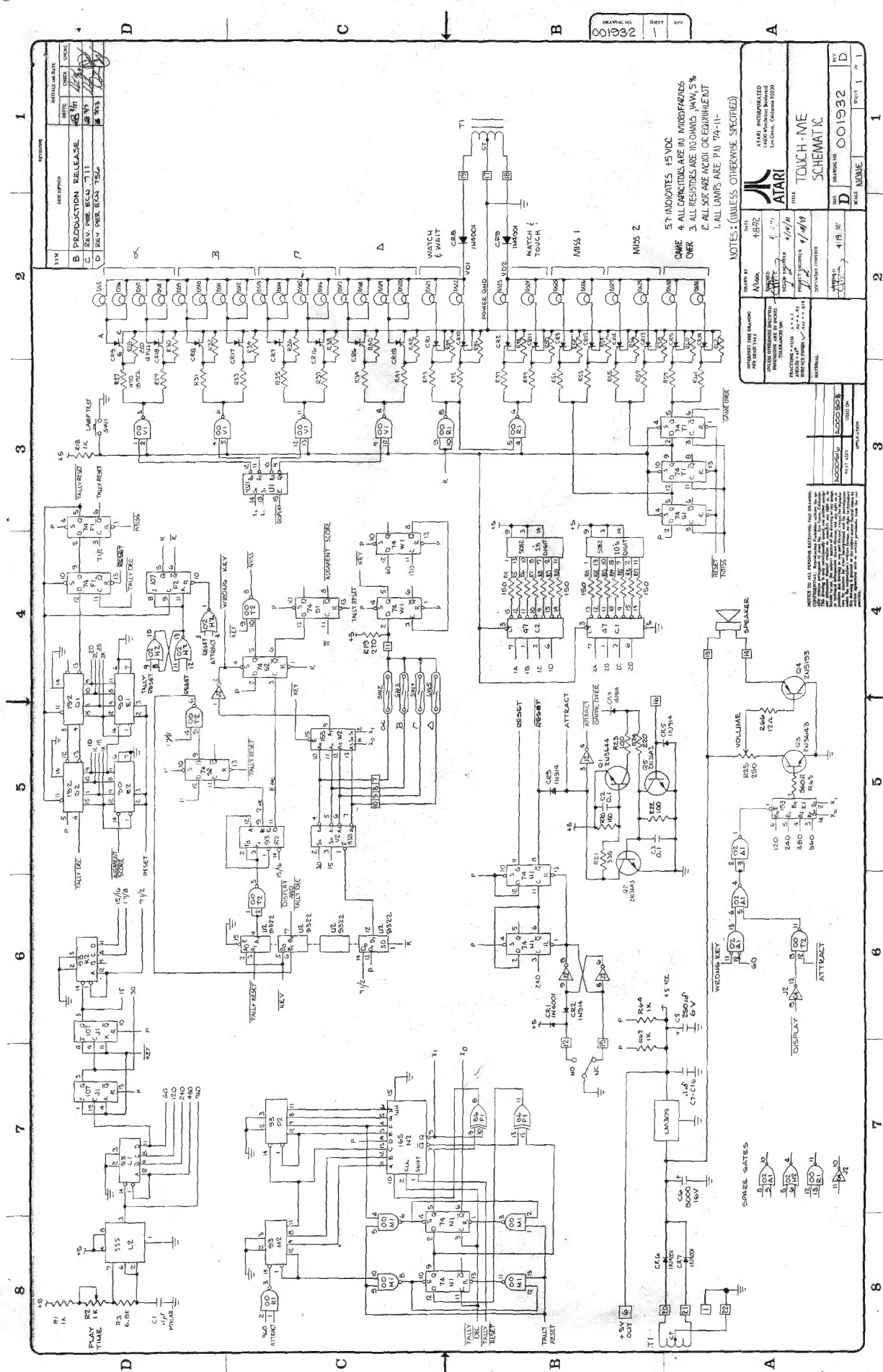Figure 3. Button Assembly

Figure 4. Wiring Diagram
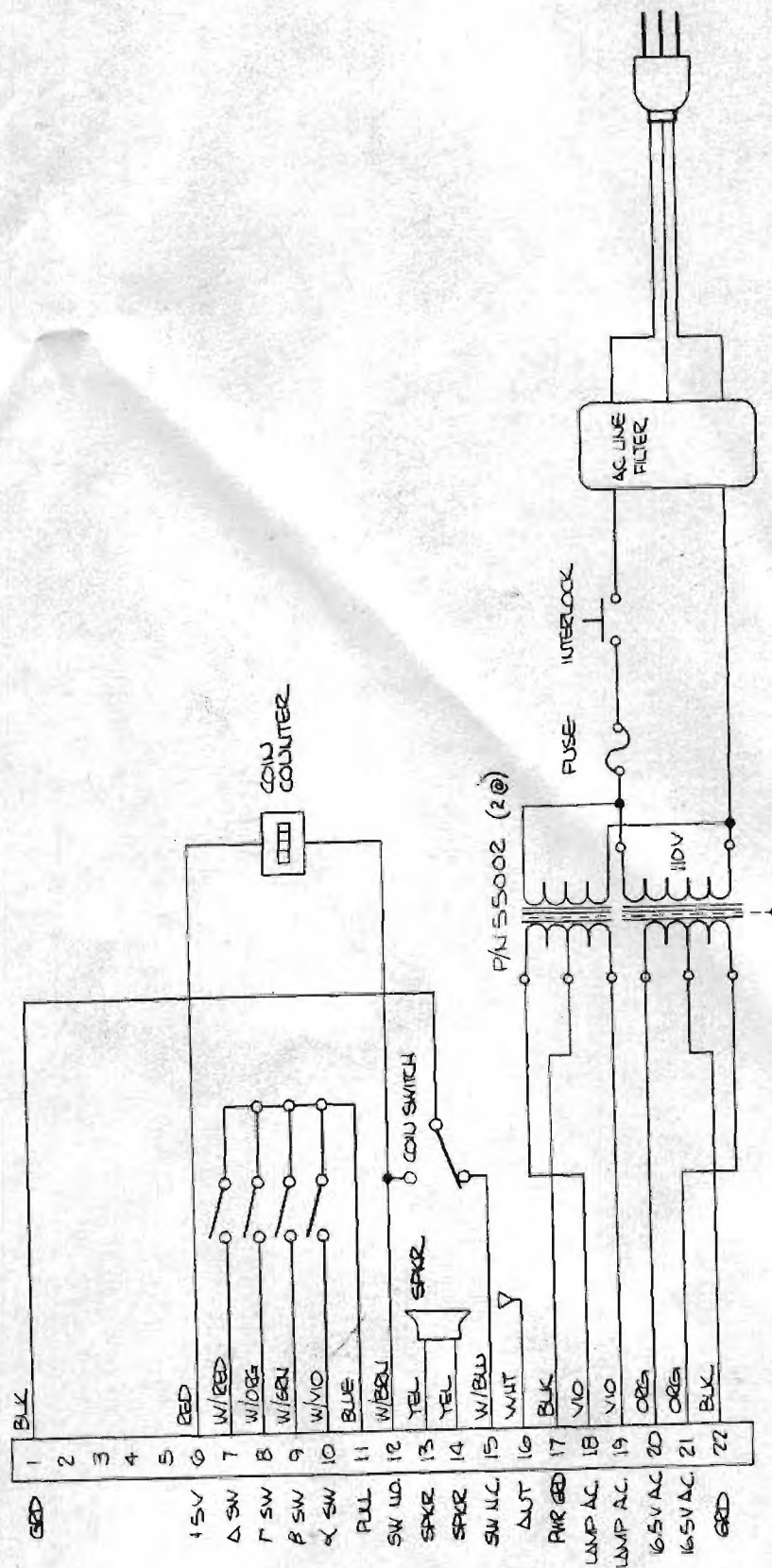
Figure 5. Computer Schematic

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Figure 6. Computer Component Location